

CLAIMS

We claim:

1. A framework that can be used for storage comprising:

recessed structural beams having a return flange at their base, a recessed flange at their top, and a rib there between, said recessed structural beams being positioned horizontally and parallel with the ground to define parallelograms there between,

at least four parallel vertical posts, each extending at a right angle to said recessed structural beams and being positioned at each of the corners of the parallelogram formed by said recessed structural beams,

at least three shelf members shaped substantially in the form of said parallelograms formed by said recessed structural beams, and

said recessed structural beams being removeably associated to vertical posts to form four corners, thereby enabling said shelf members to be supported by said recessed structural beams and removeably secured by said recessed flanges of said recessed structural beams.

2. A framework as defined in claim 1 wherein said recessed structural beams include a variable number of fingers formed from the ends of said recessed structural beams proportionately located near the base and top in a combination that will enable the assembly of said recessed structural beams to said vertical posts.

3. A framework as defined in claim 2 wherein said vertical posts include two perpendicular planes which meet at a right angle, said posts are orientated to create a corner open to said recessed structural beams, and each plane of said vertical posts contain slots spaced from the top of said vertical posts to the base of said vertical posts enabling said vertical posts to fasten to said structural beam.

4. A process of assembling a framework as defined in claim 3 by way of:

orientating the recessed flange on each of said recessed structural beams toward the center of the parallelogram created by four recessed structural beams,

aligning said fingers on each of said recessed structural beams with the upper opening of said slots on said vertical posts,

inserting the bottom portion of said fingers into the top portion of said slots of said vertical posts which enables the fingers to securely fasten said recessed structural beams to said vertical posts by dropping vertically until the edge of said finger comes into contact with the top of said slots thereby creating a tight fit, this insertion of said fingers with said slots is executed at both ends of said recessed structural beams with corresponding vertical posts, and

said shelf member is removeably secured to recessed structural beams by resting on said recessed flanges of each of four said recessed structural beams, which combines with said taper allowing slight clearance at the top of said shelf member for various attachments.

5. A framework as defined in claim 1 wherein said recessed structural beams include a variable number of circular apertures on the ends of said recessed structural beams proportionately located near the base and top in a combination that will enable the assembly of said recessed structural beams to said vertical posts.

6. A framework as defined in claim 5 wherein said vertical posts include two perpendicular planes which meet at a right angle, said posts are orientated to create a corner open to said recessed structural beams, and each plane of said vertical posts contain key shaped apertures spaced from the top of said vertical posts to the base of said vertical posts enabling said vertical posts to fasten to said recessed structural beams.

7. A process of assembling a framework as defined in claim 6 by way of:

orientating the recessed flange on each of said recessed structural beams toward the center of the parallelogram created by said four recessed structural beams,

aligning said circular apertures on said recessed structural beams with said key shaped apertures on said vertical posts,

inserting screws or bolts through the circular apertures on said recessed structural beams and lower portion of the key shaped apertures of said vertical posts,

fastening nuts to said screws or bolts thereby securing said recessed structural beams to said vertical posts by creating a tight fit, and

said shelf member being removeably secured to recessed structural beams by resting on said recessed flanges of each of four said recessed structural beams, which combines with said taper allowing slight clearance at the top of said shelf member for various attachments.

8. A framework that can be used for storage comprising:

recessed structural beams having a return flange at their base and a recessed flange at their top, said recessed structural beams being positioned horizontally and parallel with the ground to define parallelograms there between,

at least four parallel vertical posts, each extending at a right angle to said recessed structural beams and being positioned at each of the corners of the parallelogram formed by said recessed structural beams,

at least three shelf members shaped substantially in the form of said parallelograms formed by said recessed structural beams, and

said recessed structural beams being removeably associated to vertical posts to form four corners, thereby enabling said shelf members to be supported by said recessed structural beams and removeably secured by said recessed flanges of said recessed structural beams.

9. A framework as defined in claim 8 wherein said recessed structural beams include a variable number of fingers formed from the ends of said recessed structural beams proportionately located near the base and top in a combination that will enable the assembly of said recessed structural beams to said vertical posts.

10. A framework as defined in claim 9 wherein said vertical posts include two perpendicular planes which meet at a right angle, said posts are orientated to create a corner open to said recessed structural beams, and each plane of said vertical posts contain slots spaced from the top of said vertical posts to the base of said vertical posts enabling said vertical posts to fasten to said structural beam.

11. A process of assembling a framework as defined in claim 10 by way of:
orientating the recessed flange on each of said recessed structural beams toward the center of the parallelogram created by four recessed structural beams,
aligning said fingers on each of said recessed structural beams with the upper opening of said slots on said vertical posts,

inserting the bottom portion of said fingers into the top portion of said slots of said vertical posts which enables the fingers to securely fasten said recessed structural beams to said vertical posts by dropping vertically until the edge of said finger comes into contact with the top of said slots thereby creating a tight fit, this insertion of said fingers with said slots is executed at both ends of said recessed structural beams with corresponding vertical posts, and

said shelf member is removeably secured to recessed structural beams by resting on said recessed flanges of each of four said recessed structural beams, which combines with said taper allowing slight clearance at top of said shelf member for various attachments.

12. A framework as defined in claim 8 wherein said recessed structural beams include a variable number of circular apertures on the ends of said recessed structural beams proportionately located near the base and top in a combination that will enable the assembly of said recessed structural beams to said vertical posts.

13. A framework as defined in claim 12 wherein said vertical posts include two perpendicular planes which meet at a right angle, said posts are orientated to create a corner open to said recessed structural beams, and each plane of said vertical posts contain key shaped apertures spaced from the top of said vertical posts to the base of said vertical posts enabling said vertical posts to fasten to said recessed structural beams.

14. A process of assembling a framework as defined in claim 13 by way of:
orientating the “L” shaped recessed flange on each of said recessed structural beams toward the center of the parallelogram created by said four recessed structural beams,
aligning said circular apertures on said recessed structural beams with said key shaped apertures on said vertical posts,

inserting screws or bolts through the circular apertures on said recessed structural beams and lower portion of the key shaped apertures of said vertical posts,

fastening nuts to said screws or bolts thereby securing said recessed structural beams to said vertical posts by creating a tight fit, and

said shelf member is removeably secured to recessed structural beams by resting on said recessed flanges of each of four said recessed structural beams, which combines with said taper allowing slight clearance at the top of said shelf member for various attachments.

15. A framework that can be used for storage comprising:

standard structural beams having an angled return flange at their base, an angled

standard flange at their top, and a rib there between, said standard structural beams being positioned horizontally and parallel with the ground to define parallelograms there between,

at least four parallel vertical posts, each extending at a right angle to said standard structural beams and being positioned at each of the corners of the parallelogram formed by said standard structural beams,

at least three shelf members shaped substantially in the form of said parallelograms formed by said standard structural beams, and

said standard structural beams being removeably associated to vertical posts to form four corners, thereby enabling said shelf members to be supported by said standard structural beams and removeably secured by said standard angled flanges of said standard structural beams.

16. A framework as defined in claim 15 wherein said standard structural beams include a variable number of fingers formed from the ends of said standard structural beams proportionately located near the base and top in a combination that will enable the assembly of said standard structural beams to said vertical posts.

17. A framework as defined in claim 16 wherein said vertical posts include two perpendicular planes which meet at a right angle, said posts are orientated to create a corner open to said standard structural beams, and each plane of said vertical posts contain slots spaced from the top of said vertical posts to the base of said vertical posts enabling said vertical posts to fasten to said standard structural beam.

18. A process of assembling a framework as defined in claim 17 by way of:
orientating the standard structural beams so that the flanges are directed toward the center of the parallelogram created by four standard structural beams,

aligning said fingers on each of said standard structural beams with the upper opening on said slots on said vertical posts,

inserting the bottom portion of said fingers into the top portion of said slots on said vertical posts which enables the fingers to securely fasten said standard structural beams to said vertical posts by dropping vertically until the edge of said finger comes into contact with the top of said slots thereby creating a tight fit, this insertion of said fingers with said slots is executed at both ends of said standard structural beams with corresponding vertical posts, and said shelf member is removeably secured to standard structural beams by resting on said standard angled flange of each of four said standard structural beams.

19. A framework as defined in claim 15 wherein said standard structural beams include a variable number of circular apertures on the ends of said standard structural beams proportionately located near the base and top in a combination that will enable the assembly of said standard structural beams to said vertical posts.

20. A framework as defined in claim 19 wherein said vertical posts include two perpendicular planes which meet at a right angle, said posts are orientated to create a corner open to said standard structural beams, and each plane of said vertical posts contain key shaped apertures spaced from the top of said vertical posts to the base of said vertical posts enabling said vertical posts to fasten to said standard structural beams.

21. A process of assembling a framework as defined in claim 20 by way of:
orientating the standard structural beams so that the flanges are directed toward the center of the parallelogram created by said four standard structural beams,
aligning said circular apertures on said standard structural beams with said key shaped apertures on said vertical posts,

inserting screws or bolts through the circular apertures on said standard structural beams and lower portion of the key shaped apertures of said vertical posts,

fastening nuts to said screws or bolts thereby securing said standard structural beams to said vertical posts by creating a tight fit, and

said shelf member being removeably secured to standard structural beams by resting on said angled flange of each of four said standard structural beams.

22. A recessed structural beam for use with a storage unit comprising:

a horizontal return flange on the base of said recessed structural beam extending the full length of said recessed structural beam,

a rib strategically positioned between said recessed structural beam's base and top, which extends the full length of said recessed structural beam,

a recessed flange at top of said recessed structural beam taking the form of "L" shape where the base of said "L" is parallel to the horizontal return flange located at the base of said recessed structural beam, the recessed flange is chamfered at both ends of said recessed structural beam enabling said recessed structural beams to create a corner fit, and

a variable number of fingers formed from the ends of said recessed structural beams proportionately located near the base and top in a combination that can enable the assembly of said recessed structural beams to said vertical posts.

23. A recessed structural beam for use with a storage unit comprising:

a horizontal return flange on the base of said recessed structural beam extending the full length of said recessed structural beam,

a rib strategically positioned between said recessed structural beam's base and top, which extends the full length of said recessed structural beam,

a recessed flange at top of said recessed structural beam taking the form of “L” shape where the base of said “L” is parallel to the horizontal return flange located at the base of said recessed structural beam, the recessed flange is chamfered at both ends of said recessed structural beam enabling said recessed structural beams to create a corner fit, and

a variable number of circular apertures on the ends of said recessed structural beams proportionately located near the base and top in a combination that will enable the assembly of said recessed structural beams to said vertical posts.

24. A recessed structural beam for use with a storage unit comprising:

a horizontal return flange on the base of said recessed structural beam extending the full length of said recessed structural beam,

a recessed flange at top of said recessed structural beam taking the form of “L” shape where the base of said “L” is parallel to the horizontal return flange located at the base of said recessed structural beam, the recessed flange is chamfered at both ends of said recessed structural beam enabling said recessed structural beams to create a corner fit, and

a variable number of fingers formed from the ends of said recessed structural beams proportionately located near the base and top in a combination that will enable the assembly of said recessed structural beams to said vertical posts.

25. A recessed structural beam for use with a storage unit comprising:

a horizontal return flange on the base of said recessed structural beam extending the full length of said recessed structural beam,

a recessed flange at top of said recessed structural beam taking the form of “L” shape where the base of said “L” is parallel to the horizontal return flange located at the base of said recessed structural beam, the recessed flange is chamfered at both ends of said recessed

structural beam enabling said recessed structural beams to create a corner fit, and

a variable number of circular apertures on the ends of said recessed structural beams proportionately located near the base and top in a combination that will enable the assembly of said recessed structural beams to said vertical posts.

26. A standard structural beam for use with a storage unit comprising:

an angled return flange so that the beam forms an acute angle of approximately 85 degrees on the base of said standard structural beam extending the full length of said standard structural beam,

a rib strategically positioned between said standard structural beam's base and top, which extends the full length of each of said standard structural beam,

a standard angled flange at top of said standard structural beam so that the beam forms an acute angle of approximately 85 degrees at the top of said standard structural beam extending the full length of said structural beam, said angled flange is chamfered at both ends of said standard structural beam enabling said standard structural beams to create a corner fit, and

a variable number of fingers formed from the ends of said standard structural beams proportionately located near the base and top in a combination that will enable the assembly of said standard structural beams to said vertical posts.

27. A standard structural beam for use with a storage unit comprising:

an angled return flange wherein said beam forms an acute angle of approximately 85 degrees on the base of said standard structural beam extending the full length of said standard structural beam,

a rib strategically positioned between said standard structural beam's base and top,

which extends the full length of each of said standard structural beam,

a standard angled flange at top of said standard structural beam wherein said that the beam forms an acute angle of approximately 85 degrees at the top of said standard structural beam extending the full length of said structural beam, and said angled flange being chamfered at both ends of said standard structural beam thereby enabling said standard structural beams to create a corner fit, and

a variable number of circular apertures on the ends of said standard structural beams proportionately located near the base and top in a combination that will enable the assembly of said standard structural beams to said vertical posts.